

Because of the advent of synthetic turf, countless children and athletes have had access to sports surfaces, practice, and skill development that just wouldn't be the same. Just like every other industry, there have been vast technological improvements over the last half century.

There were lots of incremental changes over the years, but the biggest improvement was infilled turf. Infilled turf was a giant leap. These new fields use taller polyethylene fibers and are filled with sand and rubber. The fibers are softer on the skin and the fields feel more like natural grass.

Suddenly demand is growing as cities, private facilities, high schools, and colleges realized the immense benefits of synthetic turf. These benefits include:

- ▶ **Play time**—Synthetic turf permits unparalleled play time. While natural grass requires significant "rest time," artificial turf may be used up to 3,000 hours per year. In the age of worrisome childhood obesity and the increasing encroachment of flat screens, parents have enough difficulty encouraging our youth to get out and play without field closures.
- ▶ **The environment**—Synthetic turf has a positive impact on the environment in many respects:
 - o Water—A natural grass field can require up to 1,000,000 gallons of water per year. A single turf field, therefore, can save 8,000,000 gallons over an eight year period. When you look across the country, BILLIONS of gallons of water are saved by synthetic turf.
 - o Landfill diversion—Each field that uses recycled tires prevents about 20,000 tires from being dumped in landfills.
 - o Pesticides are unnecessary.
- ▶ **Cost**—Synthetic turf is less expensive over time. Although the initial investment is higher for synthetic than it is for natural, the maintenance savings over time offset this upfront cost.
- ▶ **Safety**—There are two areas of concentration—lower ligament protection and force reduction. Product features and technologies have emerged to help protect players. Independently funded research by Michigan State University has shown that systems with a RootZone (shorter, crimped fibers that help hold the infill in place) transmit less torque to limbs than natural grass does. Penn State arrived at similar findings. What's more, the RootZone helps keep rubber infill in place, providing consistent shock attenuation and force reduction. Synthetic turf also allows for shock absorbing pads, which aren't usable with natural turf.

There's a nostalgia that comes with the smell and feel of a natural grass field. There will always be a place for natural fields, but synthetic turf is an undeniably useful alternative when the needs of a community outpace the capacity of its fields.

